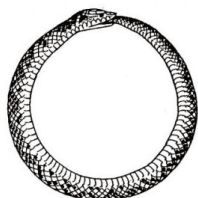


THE LUNAR BASIS OF MYTH AND SYMBOL

THE LUNAR BASIS OF MYTH AND SYMBOL



MMXIII ꞑ OUTLANDS *ten*

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PART ONE

Survey

NORTH-SEMITIC				GREEK				ETRUSCAN		LATIN			MODERN CAPS.		
Early Phoenician	Early Hebrew (cuneiform)	Mosaic	Phoenician	Early	Eastern	Western	Classical	Early	Classical	Early	Early Monumental	Classical	Gothic	Italic	Roman
𐤀 ⁽¹⁾	𐤁 ⁽¹⁾	𐤂 ⁽¹⁾	𐤃 ⁽¹⁾	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α
𐤄 ⁽²⁾	𐤅 ⁽²⁾	𐤆 ⁽²⁾	𐤇 ⁽²⁾	Β	Β	Β	Β	Β	Β	Β	Β	Β	Β	Β	Β
𐤈 ⁽³⁾	𐤉 ⁽³⁾	𐤊 ⁽³⁾	𐤋 ⁽³⁾	Γ	Γ	Γ	Γ	Γ	Γ	Γ	Γ	Γ	Γ	Γ	Γ
𐤌 ⁽⁴⁾	𐤍 ⁽⁴⁾	𐤎 ⁽⁴⁾	𐤏 ⁽⁴⁾	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
𐤐 ⁽⁵⁾	𐤑 ⁽⁵⁾	𐤒 ⁽⁵⁾	𐤓 ⁽⁵⁾	Ε	Ε	Ε	Ε	Ε	Ε	Ε	Ε	Ε	Ε	Ε	Ε
(see letter C)				Υ	(see letter U)			Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
𐤔 ⁽⁶⁾	𐤕 ⁽⁶⁾	𐤖 ⁽⁶⁾	𐤗 ⁽⁶⁾	Ζ	Ζ	Ζ	Ζ	Ζ	Ζ	Ζ	Ζ	Ζ	Ζ	Ζ	Ζ
𐤘 ⁽⁷⁾	𐤙 ⁽⁷⁾	𐤚 ⁽⁷⁾	𐤛 ⁽⁷⁾	Θ	Θ	Θ	Θ	Θ	Θ	Θ	Θ	Θ	Θ	Θ	Θ
𐤜 ⁽⁹⁾	𐤝 ⁽⁹⁾	𐤞 ⁽⁹⁾	𐤟 ⁽⁹⁾	Ι	Ι	Ι	Ι	Ι	Ι	Ι	Ι	Ι	Ι	Ι	Ι
(see letter I)				Κ	Κ	Κ	Κ	Κ	Κ	Κ	Κ	Κ	Κ	Κ	Κ
𐤠	𐤡	𐤢	𐤣	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ
𐤨	𐤩	𐤪	𐤫	Μ	Μ	Μ	Μ	Μ	Μ	Μ	Μ	Μ	Μ	Μ	Μ
𐤬 ⁽¹⁰⁾	𐤭 ⁽¹⁰⁾	𐤮 ⁽¹⁰⁾	𐤯 ⁽¹⁰⁾	Ξ	Ξ	Ξ	Ξ	Ξ	Ξ	Ξ	Ξ	Ξ	Ξ	Ξ	Ξ
𐤰 ⁽¹²⁾	𐤱 ⁽¹²⁾	𐤲 ⁽¹²⁾	𐤳 ⁽¹²⁾	Ο	Ο	Ο	Ο	Ο	Ο	Ο	Ο	Ο	Ο	Ο	Ο
𐤴	𐤵	𐤶	𐤷	Π	Π	Π	Π	Π	Π	Π	Π	Π	Π	Π	Π
𐤹 ⁽¹³⁾	𐤺 ⁽¹³⁾	𐤻 ⁽¹³⁾	𐤼 ⁽¹³⁾	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ
𐤾	𐤿	𐥀	𐥁	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ
𐥃 ⁽¹⁴⁾	𐥄 ⁽¹⁴⁾	𐥅 ⁽¹⁴⁾	𐥆 ⁽¹⁴⁾	Τ	Τ	Τ	Τ	Τ	Τ	Τ	Τ	Τ	Τ	Τ	Τ
𐥇	𐥈	𐥉	𐥊	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
(1) = ' (10) = s															
(2) = g (11) = ks															
(3) = k (12) = ' (13) = s															
(4) = h (14) = s (15) = kh															
(5) = z (16) = ph															
(7) = t (17) = ps															
(8) = th (18) = o															
(9) = y															

I CONJECTURED EARLY ALPHABETS
[DIRINGER, *The Alphabet* VOLUME II, p373]

ALPHABET

IN 1995 I NOTICED a previously undetected association between the Alphabet and the moon which led to a thesis about its conception. Several key letters appear to have originated as symbols not only representing, but also tracing the phases of the lunation.

The third letter (C) resembles the third phase (waxing crescent); the ninth letter *theta* (Θ), the ninth phase (waxing half-moon); the 15th letter (O), the 15th phase (first full moon); while the first two letters incorporate single ($\bowtie$) and double (B) sighting vertices respectively (like scopes), with a cancel-line struck through, in accordance with the first two (dark) nights of the lunation when no moon is visible in the sky.

Second full moon (on day 16 of the cycle) is represented by a square-like character resembling a trilithon (Π , the 16th letter in the Alphabet), whose adoption in mathematics (*pi*) appropriately denotes the geometrical relation between the diameter and circumference of a circle. A diameter, when projected outward in the four cardinal directions (in tangent with the circumference of the circle symbolizing the full moon on day 15), which encloses the circle in a square. In other words, the figure of the related square proves a fitting symbol for differentiating the second or 'squared' full moon from the first.

The 17th letter (Q) likewise accords with the first waning phase (occurring on day 17), a full circle (like the preceding phase, full moon) trailing a tail to the right, a downstroke arguably signifying 'descent' (day 17 inaugurating the waning or descending arc of the lunation). The first night of the waning arc is accordingly identifiable by the sliver shaved appropriately from the right side of the full moon.

And the letter X (*chi*) represents the waning half-moon as a reflection (or mirror-image) of its waxing correlative: the oblique line of the waning half-moon inclined in opposition to that of its waxing counterpart (as they actually appear).

These focal letters display three key points of convergence with the lunation:

FORMAL the letters appear to be drawn from their corresponding phases;

ORDINAL both fall in the same places in their respective sequences; and

SPECTRAL they involve the only phases in the lunation identifiable on sight.

Such characters would obviously prove ideal in keeping track of recognizable phases over extended periods of time (by marking the appropriate letter-pictures in successive cells of a blank calendar register).

ELABORATED MORE FULLY IN

God's Wand: The Origin of the Alphabet.

The Lunar Origin of the Alphabet.

Lunar Phases in the Alphabet.

LUNAR CYCLES

Discovery of the lunar correspondences in the Alphabet led to an investigation of lunar mechanics, which revealed three highly enigmatic cycles confronting the primitive observer:

[A] LUNATION comprising 29.530588 days (on average) divided into two arcs (waxing and waning) incorporating four quarters¹ which harbour:

12 visible waxing phases (nights 3 to 14),

2 full moons (15 and 16),

13 or 14 visible waning phases (17 to 29 or 30) and

2 dark nights (1 and 2): for a total of

29 or 30 phases (27 or 28 of them visible);

¹ The four quarters (which strictly exclude the half-moons, nights 9 and 23; and two dark nights, 1 and 2), section the lunation along distinctly formal lines: waxing concave (phases 3 to 8 = 6), waxing convex (10 to 16 = 7), waning convex (17 to 22 = 6) and waning concave (24 to 29 or 30 = 6 or 7).

[B] COURSE CYCLE extending 230 lunations (6792.03524 days or very nearly 18.6 years)² before the moon retraces its rising and setting points on the horizon;

[C] PHASE CYCLE consuming 235 lunations (6939.68818 days or just over two hours more than 19 years)³ between recurrences of the same phase (most reliably, waxing half-moon) on the same solar date (ideally, equinox).

This led to two further insights which surrendered the keys to ancient myth and iconography:

[D] waxing crescent appears inexplicably in the western sky; while the final phase, waning crescent, disappears in the east (the lunation progressing in apparent opposition to solar and stellar mechanics);

[E] only seven visible phases (which I term ‘spectres’) and two unseen phases (or ‘a-spects’) are readily identifiable on sight (all other phases in the lunation proving empirically indistinguishable): opposing crescents; opposed half-moons; twin full moons; first waning phase; and two dark nights.

These nine identifiable phases presented ideal candidates for deification in ancient cultures (eg, the Egyptian Ennead or *Paut*) while the seven identifiable spectres accord with the sacred number seven:

FOCAL EGYPTIAN AND HELLENIC PANTHEONS

[1]	NEPHTHYS	first dark night	ARTEMIS
[2]	ISIS	second dark night	DEMETER
(3)	HORUS	waxing crescent	ARES
(9)	THOTH	waxing half-moon	HERMES
(15)	AMON	first full-moon	APOLLO
(16)	RA	second full-moon	ZEUS
(17)	SET	first waning phase	POSEIDON
(23)	PTAH	waning half-moon	HEPHESTUS
(30)	OSIRIS	waning crescent	HADES / PLUTO.

2 $18.6 \times 365.2422 = 6793.50492$.

3 $19 \times 365.2422 = 6939.6018$.

Lunar cycle, in other words, appears to represent the long-lost model upon which ancient myth and symbol were based.

CITING

*The Lunar Origin of the Week.
Seminar.*

ICONOGRAPHY: GODDESS

If ancient iconography proves lunar, the goddess, as becomes evident from the model of the lunation, is never seen; she remains out of sight in the underworld (the white, or lunar goddess thereby synonymous with the earth-mother goddess in various cultures). Which may explain why the so-called Venus figurines lack faces (the absence of eyes signalling invisibility).

The moongod alone is visible. The visible phases were deemed male in part because the terminal crescents resemble a phallus, capable of 'rising'.

Yet two nights each lunation, the moongod too is compelled to retreat into the darkness of the underworld to be restored to sight through the intercession of the goddess.

Two Marys, one no stranger to 'sin' (the carnal Mary Magdalene), the other beyond reproach (the ethereal Virgin Mary), remarkably sustain the ancient iconography of twin goddesses resident in the underworld (one sinister, the other sanctified), personifying the two dark phases between visible lunations.

In the Egyptian myth, Osiris (waning crescent, resembling a phallus) copulates with Nephthys (wife of Set)⁴ begetting Anubis, his shadow son; while Isis (her role as 'double' accentuated in the doubled syllable of her name) magically gives birth to Horus the avenging 'son' of Osiris.

⁴ Set embodied the 'fullest' waning phase while Osiris was the 'leanest'. Thus it may be seen that Osiris represents Set at his leanest or oldest (or conversely, Set, Osiris as a youth, at his fullest). In this respect Nephthys, wife of Set, was not adulterous in receiving Osiris as her lover.

RA AMON

16 15

14 13 12 11 10 9

8 7 6 5 4 3

2 1

30 29 28 27 26 25 24 23 22 21 20 19 18 17

SET

PTAH

THOTH

OSIRIS

HORUS

con vex

gutturing

max ing

con cave

NEPHTHYS ISIS

two dark nights

II COMPASS OF THE EGYPTIAN THIRTY-DAY LUNATION



III VENUS OF LAUSSEL

Horus (waxing crescent) presents a mirror image of his ‘father’ (the ‘phallus’ figuratively reflected as a ‘brandished blade’) following three days and two nights during which the moon is absent from the sky, in the underworld.

FOCAL EGYPTIAN PANTHEON

[1]	NEPHTHYS	first dark night
[2]	ISIS	second dark night
(3)	HORUS	waxing crescent
(9)	THOTH	waxing half-moon
(15)	AMON	first full-moon
(16)	RA	second full-moon
(17)	SET	first waning phase
(23)	PTAH	waning half-moon
(30)	OSIRIS	waning crescent

This doubled name-clue in the second of the two underworld ‘sisters’ recurs in the names of the Sumerian goddess Inin (Inanna, Nin, Nana); her Hurrian counterpart Hannahannah; and descriptively in Hellenic Demeter (‘deo-metera’ signifying “double mother” as well as the more evident “mother goddess” in ‘thea-metera’) among others.

In the Arthurian cycles, ‘evil Guenevere’, the all-but-identical half-sister of ‘Guenevere of the regal birthmark’, supplants her irreproachable ‘twin’ as Arthur’s queen, for a telltale two-and-a-half ‘years’ (echoing the two-and-a-half days between visible lunations).⁵

The first of the two underworld goddesses surrenders to the advances of the submerged waning crescent (which most resembles a phallus, among visible spectres); the terminal phase of the extinguished lunation (the phallic crescent) thereby instilling the carnal twin in their subterranean lair with the seed of the succeeding lunation.

Yet it is the second (her ‘double’) who miraculously delivers the new lunation without ever herself having been inseminated (a mystical or virgin birth).

⁵ ‘Gyny’ (Greek for “woman”) + ‘ver’ (arguably cognate with Egyptian ‘wur’ or “underworld”) intimating ‘underworld woman’.

In *The Descent of Inanna*, the Sumerian goddess retreats into the underworld for the funeral of the Bull of Heaven (referred to enigmatically as husband to her sister Ereshkigal) where she is required to disrobe in seven stages while passing through seven gates,⁶ arriving naked before her sister whom she displaces on the throne of the underworld momentarily, before expiring.

Like the other 'double' goddesses, Inin (Inanna) is enigmatically characterized as both 'chaste' and 'promiscuous' (absorbing the character of her carnal 'twin'): two distinct inclinations constituting halves of a solitary entity, a single underworld goddess personifying different aspects for each of the two dark nights (a division most conspicuous in the double Guenevere).

Inanna is revived however and liberated after three days and nights, through the intercession of grandfather Enki (who creates not one but two 'earth spirits' or devils to take her place, in accordance with the two dark nights).⁷ While her husband Dumuzi and his 'sister' alternately spend half the 'year' in the underworld to appease Ereshkigal for Inanna's escape (which accords with the alternating reigns in the underworld, of the male phase during the day and female during the night, projected across a year to highlight the lunar focus of the annual calendar).

Dumuzi's 'sister' alludes to the precept that the goddess begets a son (waxing crescent) who ultimately becomes her sire (waning crescent), yet both of them constitute siblings of a common parentage (the lunation). This is also the basis for the esoteric epithet 'son of the widow' given that waning crescent (the sire) must die, for waxing crescent (his son) to be delivered.

- 6 The 'seven gates' accommodate the seven focal spectres (or visible phases) of the revealed lunation, who govern the celestial portion of the cycle (portals to the heavenly realm).
- 7 On the third night the goddess has been effectively restored to her role as mate of the spectral moon-god (thus liberated from captivity), with the rise of the introductory spectre of the new lunation (waxing crescent).

The diversity of goddesses in many ancient cultures has understandably prompted scholars to associate individual goddesses with separate phenomena (a lunar goddess distinct from a Venus goddess). But from a lunar perspective it becomes clear they merely summon different aspects of lunation.

Ninlil (consort of Enlil) gives birth to Nannar the moon god; while Ningal (daughter of Enki) is his wife. In other words, Ninlil gives birth to the lunation (Nannar), while Ningal (Nannar's wife) gives birth to the individual phases.

Her progeny include Šamaš (Utu) and Inanna, conventionally held to be the Sun and the planet Venus respectively; whereas in a lunar light 'the most brilliant phase' describes full moon, and 'the underworld goddess', the two dark nights. The two-night interruption in the visible lunar cycle presents a previously unrecognized alternative to the sustained absence of Venus from the sky,⁸ for interpreting the texts in a lunar rather than planetary light.

Scholars likewise categorically defend Šamaš or Utu as the sun, oblivious to the possibility of an alternative. Yet the phrases 'brightest one' or 'life-giving one' would apply equally well to the brightest phase in the lunation. Full moon, after all, comprises the 'life-giving' spectre in the cycle, whose radiance appears to be reflected in the light of both its emergent (waxing) and remnant (waning) diminutions: all the visible phases which lead to full moon, in other words, having been conceptually subsumed in its fullness.

A clue in the palindromic form of the names of the so-called 'sun-god', Šamaš or Utu, echoes the doubled form in those of the underworld goddess, Inin and Isis. This accords with twin full moons at the apex of the lunation, which

8 The 584-day synodic cycle of Venus includes two periods of invisibility, the first (50 days) following 263 days as a morning star, and second (8 days) following 263 days as an evening star. A cycle, moreover, which has consumed 2920 days after five cycles ($5 \times 584 = 2920$) amounting to 8 calendar years ($8 \times 365 = 2920$). This coincidence has led many to interpret ancient records of the first lunisolar calendar in history (the 8-year variable-month calendar) as Venus intervals.

cleave the cycle in two mirrored or back-to-back arcs (though neither full moon strictly comprises a waxing or waning phase).

Which is why the Egyptian gods Amon and Ra are so seldom encountered *on their own* in the texts, but rather in the compound form, Amon-Ra (full moons conjoined like twins). It bears adding that the name Amon fairly begs identification with the moon.

Accordingly, the breasts of the goddess represent full moons (while the so-called 'solar disc' with nipple, and 'solar wheel' quartered like the lunation, by spokes, also prove compatibly lunar).

In later pantheons, distinctive Aspects of the goddess (*eg*, the Seven Hathors or Seven Sisters) couple individually during the moon's daily retreat into the underworld, with their respective mate (among the seven focal spectres in the cycle, known in Sumeria as the Seven Who Decree), to beget the phase(s) for the succeeding night(s).

The triple-goddess (mother-maiden-hag) elaborates yet another refinement of the role of the moongod's mate, distinguishing three encompassing stages of the cycle, in the Goddesses of

[A] ABUNDANCE in the guise of the emergent Maiden (who gives birth to the waxing arc of the cycle, her progeny increasingly 'full');

[B] DECAY the declining Hag (whose waning arc produces a progressively lean litter); and

[C] RENEWAL Mother-Goddess (begetting the new lunation).

Mary Magdalene's seven 'demons' are congruent with the seven focal visible lunar phases on their submergence in the dark underworld, slithering into the recesses of the earth during the three days and two nights of darkness between successive lunations.⁹ Archaic belief ascribed the 'decay' of

9 Christ's interment, likewise, extends three calendar days (Good Friday, weekly Sabbath, Easter Sunday) consuming two captive nights.

the full moon to a demonic underworld serpent consuming increasing portions of 'his captive' daily throughout the waning arc of the cycle.

Seven focal phases (ancient gods adapted to monotheism in the new guise of luminous archangels, when visible on high), fallen like Satan into the Abyss (when gone from the sky). Egyptian Set, who inaugurates the waning arc of the cycle on day 17 (thus Lord of Decline), supplying the etymon for 'Satan'.

CITING

Instructions for Restoring the Ancient Wisdom: A Primer of the Pythagorean Practicum.

Shrouded in Scripture.

Fluke Photo.

SERPENT

Before the discovery of the male role in Conception (which I maintain incited the revolutionary Neolithic advancements of Husbandry and Agriculture, in that order), the lunar cycle was apparently held to have been governed by the goddess.

The crescent in the right hand of the so-called Venus of Laussel bears 13 incised strokes (p12), which accords with the waxing arc of the lunation (comprising 13 visible phases from crescent on the third night, to full moon on the 15th). It is natural, moreover, to associate this arc with the right side because the curved right arm when raised resembles waxing crescent (its initial spectre).

Her left hand rests on her belly to signify that she's given birth to these 13 phases, which grow from a tiny crescent to full term in the ultimate spectre (full moon raising the spectre of a full belly).

The full moon, however, appears to have concluded the divine cycle in such Palæolithic renderings. The waning arc of the lunation, in contradistinction, was arguably presumed

to be the result of a nefarious underworld serpent consuming the divine 'fruit' of the provident goddess night by bloody night until it was gone. A frightful spectacle because no one knew for certain if the moon would return.

Until the discovery of the male role in Procreation, in other words, the lunation was arguably held to be the magical embryo of the earth-mother goddess, in whom all nature (but man himself) was nurtured to fruition. The moon, subsiding each dawn into the underworld, appeared to be reborn anew each evening (but two) from the cavity of her subterranean loins (epitomized in the caves in which the Palaeolithic murals were maintained in homage to her providence).

It bears noting that until Procreation was understood, birth was held to be magical (the ancients believing that Conception ensued when the menstruating woman caught sight of the full moon, or conversely a comet).

Early man considered the moon the dominant celestial deity because it presided over him at his most vulnerable (in sleep) while further presenting a different face each night, confiding more of the divine order than the sun, stars or planets.

But because individual lunations vary in length (the mean measure computed at 29.530588 days) it proved difficult to interpret what the lunar deity might be trying to convey, given the irregularity of the cycle. The interval between focal phases (eg, waxing crescent and waxing half-moon) in two different lunations in the same year, for instance, can vary by as much as 36 hours (which would account in part, for the apparently 'unreliable' variability in the Marshack counts).¹⁰

Ultimately a breakthrough emerged with the discovery that the half-moon held a clue: a string the length of the diameter of any circle, it turned out, comprises just under a

10 ALEXANDER MARSHACK *The Roots of Civilization: The Cognitive Beginnings of Man's First Art, Symbol and Notation* (1972) MCGRAW-HILL, vp.

third of its circumference. In other words, this discovery led ancient man to the realization that the 'language' of the lunar message was Measure. Which explains why Thoth, Egyptian god of measure, epitomized waxing half-moon (source of the only apparently straight line in nature).

The serpent represented both the chthonic aspect of lunar cycle (waning arc delivering the moon back to captivity in the underworld for two dark nights during which it shed its old cycle like old skin) and the serpentine movement of the moon variously through the lunation, the year, and the wildly undulating 18.6-year Course (or Nodal Regression) cycle.

The wide swing of rising points (within the same lunation) traces a distinct slither across the sky, which, added to the archaic impression of a serpent consuming the terminal arc of the cycle, gave rise to the oroboros eating its tail.

Both Mayan and Egyptian iconography project the lunation as a 'plumed serpent': the *quetzal* of the Maya, and the 'white crown with vulture' of Upper Egypt, each arguably representing the waxing arc (higher ground naturally equated with 'rising'); in opposition to the *coatl* (or serpent), and 'red crown with cobra' of Lower Egypt (red symbolizing the blood of the dying cycle shed throughout the waning arc which ultimately runs to ground, equated with the low-lying Delta).

It bears noting that blood is further naturally associated with the underworld precinct of the goddess through association with the monthly discharge (from 'down below') of the menstruating female.

CITING

God's Shadow: A Chronological Supplement of Sample Figures Illustrating a Continuous Tradition of Covert Lunar Notation. The Dawn of Procreation.

Instructions for Restoring the Ancient Wisdom: A Primer of the Pythagorean Practicum, pp38/9.

UNDERWORLD

The underworld, as incorporated in the Egyptian concept of *Sin Wur* (or the Greek, *Okeanos Potamos*), proves the subterranean arm of a *divided* sea.

The notion of an ocean in the sky derived not only from the fact that it rains, but also from the discovery that it gets colder the higher you climb, against all expectations. Early man might fairly have expected an increasingly warmer reception the nearer he got to the sun.

And the moon clearly appears to be partly submerged in a celestial sea on all but four nights of its enigmatic cycle (twin full moons; and the two dark nights when the moon is completely submerged).

The two arms of *Okeanos Potamos* were presumed to engulf the disc of earth (like a sandwich), with gods such as Enlil and Enki presiding respectively over the sweet and salt tributaries.

While the fact that the celestial luminaries lost their light to the waters on a daily (moon and stars) or nightly basis (the sun; together with the moon during those two dark nights), only to be reborn anew in due time, led naturally to the conclusion that both over- and underworld arms of the enveloping seas were mystically transformative.

The waters obviously had the power to restore as well as extinguish light (thus, life); not merely provide the crucial means of survival.

Before the refinements of natural philosophy (in the first millennium BC), therefore, the stars were held merely to float on the mystical mere, dapples in the heavenly ebb and flow. The magic of those amniotic depths far outshone the twinkle of the heavenly host in early man's cosmological esteem.

The stars, after all, remain a spectacle; they merely shine. Their movement across the skies, as should be evident to anyone who has ever been adrift in a boat, is purely the consequence of currents, tides and winds.

And the most conspicuous gauge to the shifts of wind and wave has ever been the moon, whose register of tides (both celestially in the advance of lunar submergence, and terrestrially in the maritime spectacle) proves more reliable than the Nilotic meter (recurring monthly, thereby theoretically more apprehensible than longer or more remote cycles): the face of the moon emerging from, and surrendering to the flood, with inscrutable yet measurable regularity.

No need, in other words, to look further for clues to the clockwork of the heavenly watch on high: the moon not only moves enigmatically, but emphatically alters its expression (potentially divulging more of the divine plan than other celestial messengers).

CITING

God's Shadow: A Chronological Supplement of Sample Figures Illustrating a Continuous Tradition of Covert Lunar Notation, pp18/9.

The Lunar Origin of the Week.

BULL

The bull figure (from the most ancient to most recent periods) consistently represents the visible portion of the lunation (the terminal letter 'omega' meaning "large O", appropriately symbolizing the completion of the spectacle). Its horns incorporate the crescents which open and close the visible cycle (while together outlining or framing full moon at the crown, figured as 'omicron' meaning "small o").

Large O represents 'the visible lunation', small o 'full moon'. It bears noting, further, that the opening at the base of the 'omega' character (Ω) conforms appropriately with the interruption in the visible lunation, of the two dark nights.

In this respect, the Christian epithet 'alpha and omega' embraces the complete lunation (the first letter 'alpha' representing the first dark night).

As shown in my readings at Lascaux, Palæolithic representations of the bull clearly accord with lunar measure. In the first mural (in the so-called Hall of the Bulls) the taurine figure on the left is only half-drawn (the visible portion of the lunation disappearing, as ensues with the waning or left-hand arc). Two bulls don't make sense as constellations; but the half-bull (waning arc of the lunation) facing a full figure (waxing arc) accurately depicts lunar cycle, accommodating the turn from rising to falling arcs.

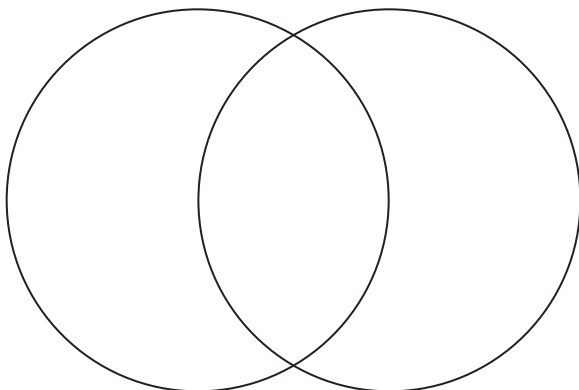
Several other features support the interpretation (white horns with upturned tip on the right bull, black horn in the form of waning crescent on the left), including the addition of a penis to the former (identifying the 'rising' arc).

In the myth of Europa, Zeus disguised as a white bull with a telltale black patch between his horns (the lunar cycle distinguished by a dark interval separating the crescents), entices the Tyrian princess onto his back before swimming west to Crete where he ravishes her, begetting a brood of three distinctly lunar demi-gods: Minos ("moon", representing the waxing arc of the new lunation), Rhadamanthus ('underworld judge' identified with the dark interval)¹¹ and Sarpedon ('serpent', the waning arc).

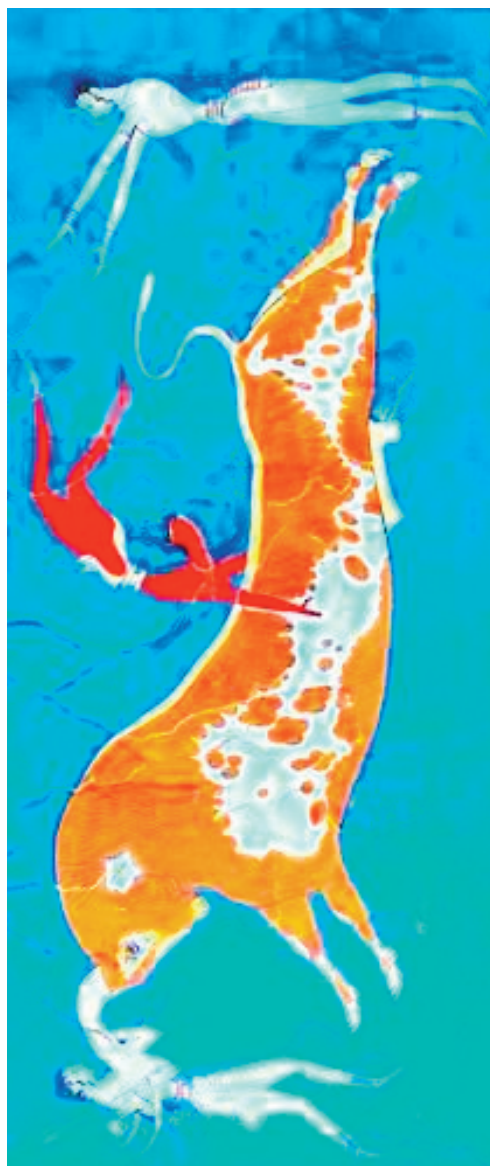
The significance in his swim is that the waxing crescent of the new lunation rises not in the east (Tyre) but in the west ('Crete', further, arguably cognate with 'crescent'). This little-known idiosyncrasy of lunar mechanics has prevented scholars from readily recognizing such lunar characteristics of ancient iconography exemplified in this and other myths.

The Minotaur (Asterion), for example, was not strictly half-man half-beast, but half-goddess half-beast; Pasiphæ being the daughter of the 'sun' (in other words the moon goddess). Mother of seven semi-divine children (like the seven focal spectres of the lunation), her monstrosity was sired by the sacrificial white bull of Poseidon. Theophany of

11 The opposing pans of the Scale of Justice employed by the underworld judge, it becomes clear, represent the two nights of darkness.



IV VESICA PISCIS



V MINOAN BULL LEAPER

the first waning phase, Poseidon governed the waning arc (intimating that his 'bull intended for sacrifice', represented the arc which 'terminates' the visible lunation, effectively identifying it with 'sacrifice').

The seven youths sacrificed to the Minotaur every seventh (or variously, ninth) 'year' emphasize the descent at the end of the waning arc, of the seven focal spectres (or alternately, nine focal phases) of the lunation, into the underworld (labyrinth) for two nights (explaining the significance in requiring two sacrificial entities: youths and maidens) before the resumption of the seven-spectre cycle in the succeeding lunation. The seven focal spectres are notably encountered together only after the 'demise of the visible lunation' (comprising their 'sacrifice'), during the two nights of darkness (which also involve the two invisible phases resident in the underworld, extending the subterranean 'sacrifice' from seven to nine).¹²

Likewise, the Minoan 'sport' of bull-leaping (depicting two white figures, one in front, the other behind the bull, with a red figure vaulting its back), is congruent with the opposed arcs bracketing the bull-like visible lunation¹³ separated by the two nights the moon spends 'upended' (in the underworld) between crescents.

The red of the vaulting figure reflects the 'blood' of the 'consumed' spectres, while his arms (rigidly extending down either side of the bull's back) distinguish the two underworld nights. His location beyond the horns (which, it bears reiterating, represent crescents enclosing full moon) situates him conspicuously 'back' of the visible lunation; while the posterior figure in white holds his arms out in a vertex (like the leaper, though at eye-level, intimating a sighting vertex directed at the sky where the visible phases preside).

12 To reiterate, the term 'phase' embraces both 'spectres' (which are visible) and 'aspects' (which are not, comprising the two dark-night phases).

13 In this case successive lunations.

Taurine association with the moon is further explicit in the Apis bull which embodied the 25-year lunar calendar employed secretly by the Egyptian priests (a bull they ceremonially sacrificed and mummified at the end of 25 calendar years).

CITING

God's Shadow: A Chronological Supplement of Sample Figures Illustrating a Continuous Tradition of Covert Lunar Notation, pp10-2 (presenting a reading of a bull mural at Çatal Hüyük).

Lascaux Measures: A Review of the Symbolism of Palæolithic Parietal Figures.

HORSE

As depicted in the Hall of the Bulls mural at Lascaux, the horse represented focal phases (the larger duotone specimens conspicuous as half-moon figures).

Following domestication, the horse, drawing a chariot bearing either a deity or disc, adopted the significance of the lunar quarter.

The four wheels beneath the horse on the Trundholm disc chariot, for example, identify quarters (emphasized in the spokes quartering the wheels).¹⁴ A bronze disc gilded on the right side only (*ie*, with the horse pointing right) accords far better with the lunation (than the sun), whose right or waxing arc is characteristically luminous (because it grows brighter by the night). While the left side of the cycle (or waning arc) appears increasingly dull as the lunation fades from view.

The bronze base connotes a lunisolar or calendrical observance (in the alloy of silver-coloured tin and gold-like copper). A recognition supported in the sum of its 177 'turns'

¹⁴ Four quartered wheels draw attention further to the spectre of second full moon on the 16th night (4×4), high point of the cycle following which the chariot must reverse.



VI LASCAUX HALL OF BULLS FRIEZE



VII LASCAUX SHAFT SCENE

computed by Klavs Randsborg ($177 \times 2 = 354$, the number of days in a rounded lunar year: $29.5 \times 12 = 354$); the two wheels beneath the disc inviting a doubling of the sum.

The winged chariot bearing the throne of heaven nightly through the sky (in the book of Ezekiel), by comparison, employs four wings at each corner, likewise emphasizing quarters.

CITING

Lascaux Measures: A Review of the Symbolism of Palæolithic Parietal Figures.

IBEX

Unlike the bull (whose horns curve in), the horns of the goat curve back, precluding their envelopment of, or completion in, the circle of full moon. Thus the goat (whose horns might therefore envelop the base of the lunation) appears to exemplify the complex of the four *regenerative* nights: waning crescent; the two dark nights; and waxing crescent (associating it both with the underworld and renewal).

The *omphalos* of the Delphian oracle, appropriately, was initially discovered (according to Diodorus Siculus)¹⁵ by a shepherd whose goat had strayed into a cavity in the cliff (the opening into the underworld from which the oracle emitted). The goat's significance as the epitome of lunar renewal, supplements the lunar focus of the sanctuary imparted by Apollo, patron deity of the oracle (who represents full moon), establishing 'the umbilicus to the gods' at its core (*ie*, the *omphalos*) as an emphatically lunar lifeline. In other words, the sanctuary of Delphi appears to have originated as a lunar shrine (or observatory).

The cloven hoof of Satan (split and black like the two dark nights when the moon is gone from the sky, a captive in the

15 DIODORUS SICULUS *The Library of History* BOOK XVI CHAPTER 26, Charles Sherman translation (1952: HARVARD) VOLUME VII, pp309–13.

underworld) originated in this affinity of the goat with lunar 'baseness'. A 'scapegoat' moreover, because the disappearance of the moon during the two nights the goat 'strays' into the chasm, might rashly be charged to his irrepressible errancy.

Its legendary randiness (*cf.* Pan) likewise accords with the tableau of Procreation pregnant in the four lunar phases which the goat embraces: waning crescent (the phallus) fertilizing the goddess of the first dark night to enable her 'double' of the second dark night to mystically deliver waxing crescent.

Great Year calendar measures (such as the 19-year Phase Cycle of the moon) were naturally associated with the underworld because their projected intervals aren't discernible on high (emerging instead through mathematical comparison of lunar and solar cycles). The Mendes goat cycle is a prime example, having been computed to rationalize the disparity arising between the Egyptian 70-year solar and 25-year lunar calendars over a period of 350 years.

CITING

Myth as Math: Calendrical Significance in the Mosaic Census of the Sons of Israël.

CAT

Whereas the bull represents the visible portion of the lunation, the lion embodies the arc (two cats nose to nose, as in the Mycenæan Lion Gate and Cretan seal impressions, depicting opposing arcs). This iconography derives from the earlier employment of leopards (*eg.* Göbekli Tepe and Çatal Hüyük) which bear spots in accordance with an accumulation of phases comprising an arc. As with the Mayan jaguar, the rarer black cat effectively accommodates the comparatively rare dark nights whose spots have been shadowed over.

CITING

Mayan Long Count Deciphered.

DOG

The dog at the gates of the underworld secures the dark interval. Anubis is the offspring of Osiris and Nephthys (the first dark night), a shadowy 'twin' to Horus (mothered by her 'twin' Isis representing the second dark night); a dog-like spectre sharing the waning quality of the Sha or Typhonian Beast of Set (lord of the waning arc).

The twins Orthrus (with two heads) and Cerberus (with three) symbolize the three days and two nights of the dark interval. And like the other underworld animal (the goat), Cerberus further accommodates great-year measure, denoted *cynic* by the Greeks and *canicularis* in Latin (which, arising through calculation rather than nature, is held to be resident in the underworld not the sky).

In this capacity Cerberus (meaning "spotted") boasts 50 heads, in reference to the 50 female (or underworld) months of the 8-year great-year cycle. Associating him with Argus (Hera's 100-eyed watchdog) who employed 50 eyes at a time, to keep track of Io (underscored by the resonance of Argos, faithful hound of Odysseus). Odysseus returns home to his Penelope (the goddess, whose lair is the underworld) after an extended period away (the great year) where he encounters his aging dog Argos on the brink of death (the great-year measure embodied by the hound of hell succumbing with the completion of the extended cycle).

BIRD

Inclined like the oblique of the half-moon, the Shaft-Scene 'birdman' at Lascaux, bears an erection identifying him with the waxing or rising half-moon (p28). Avian (or concave) phases naturally culminate with waxing half-moon because convex phases exceed the telltale outline of outstretched wings. The bird facing in the opposite direction in the Shaft

Scene, accordingly represents waning half-moon, the stick on which it perches signifying descent (flight being restricted to the rising phases).

The crane, white and black, is also like the lunation (which incorporates two dark nights). As conjectured, the letters of the Alphabet originated as symbols not only representing, but also tracing the phases of the lunation. An ancient account of the invention of the Alphabet, attributed to Hyginus (64 BC – 17 AD), maintains that Hermes or Thoth derived the letters from the flight of cranes (the original Alphabet, in his account, comprising only 13 letters, which corresponds with the 13 phases of the waxing arc of the lunar cycle from crescent to full moon, in accordance with the Gravettian focus on waxing cycle evident in the Venus of Laussel figurine).

The vulture too (at Göbekli Tepe and in the vulture emblem of Upper Egypt) soars (like lunar spectres) while also consuming 'the dead' (the phases extinguished by day).

CITING

Lascaux Measures: A Review of the Symbolism of Palæolithic Parietal Figures.

PART TWO

Puzzles

AS IS EVIDENT WITH ‘the spread of Domestication’, not to mention ‘myths of the Flood’ (whether through diffusion, transmission or absorption), the likelihood of an apparently pervasive lunar iconography may not be as improbable as it seems. Numerous unsolved ancient ‘puzzle texts’ also prove mathematically congruent with lunar cycle (despite their wide separation in time and place), supporting the possibility. A few examples from my work, should add cogency to the foregoing alphabetic, mythic and iconic parallels.

Can it be purely a coincidence that the origin of the Alphabet (which has never been determined), together with the meaning of myths (most of which prove conjectural), the identification of icons (which remain open to interpretation) and solution to a number of ancient puzzles (which have never been solved), are all readily deciphered with a single common hypothesis?

MAYAN LONG COUNT CALENDAR

The seventh-century verse on ‘Tortuguero Monument 6’ from southern Tabasco, Mexico (reportedly the only recognized inscription preserving an explicit reference to B’ak’tun 13) reads:

“It will be completed the 13th b’ak’tun.

It is 4 Ajaw 3 K’ank’in

and it will happen a ‘seeing’ [?].

It is the display of B’olon-Yokte’

in a great ‘investiture’.”

[http://en.wikipedia.org/wiki/2012_phenomenon]

The translators have tentatively identified two of the three elements in the name of the putative god ‘B’olon-Yokte’ as “nine” and “god” (with ‘ok-te’ undeciphered).¹⁶

16 SVEN GRONEMEYER AND BARBARA MACLEOD, ‘What Could Happen in 2012: A Re-Analysis of the 13-Bak’tun Prophecy on Tortuguero Monument 6.’ 2010: Wayeb Notes 34: UNIVERSITY OF COPENHAGEN: EUROPEAN ASSOCIATION OF MAYANISTS, pp1–68.

Given the tendered translation of the recognized elements in the construct 'B'olon-Yokte' ("nine gods", arguably representing 'the completed lunation'), the possibility emerges that the anticipated 'end-time' of B'ak'tun 13 could well signal an *integral* compound lunar interval.

One b'ak'tun (20 k'atun) is equal to 144,000 days (a k'atun of 7200 days being equal to 20 tun, which each comprise 18 twenty-day uinal, or 360 days). Thus 13 b'ak'tun equal 1,872,000 days.

The verse in question, in other words, appears to purport that "a display of B'olon-Yokte' in a great investiture" will ensue every 1,872,000 days.

Parcelling 1,872,000 days into lunations (each extending 29.530588 days, as scientifically computed) produces a quotient of 63,391.897242 lunations¹⁷ (equivalent to 5125 years 133 days 17 hours 24 minutes 4 seconds).

Given the protracted difficulty in calculating the mean measure of the lunation empirically, it is not inconceivable that the culture responsible for the verse (Mayan, Olmec, Zoque or other) had arrived at a computation which they were convinced divided precisely into 1,872,000 days. As 63,391.897242 lunations so nearly approaches the figure 63,392, their putative 'measure of mean lunation' may be computed simply by dividing 63,392 into 1,872,000 days.¹⁸

The result (29.530540 days) deviates from the modern measure of mean lunation (29.530588 days) by .000048 days or 4.1472 seconds.¹⁹ In other words, this putative ancient calculation comes within 4 seconds of the current scientific measure (a remarkable feat given that lunations vary in duration). The later *Dresden Codex* attests to Mayan interest in a measure of mean lunation (surrendering, however, the somewhat less accurate average of 29.5302 days).

17 $1,872,000 \div 29.530588 = 63,391.897242$.

18 $1,872,000 \div 63,392 = 29.530540$.

19 $29.530588 - 29.530540 = .000048$ day;
 $.000048 \text{ day} \times 86,400 \text{ seconds/day} = 4.1472 \text{ seconds}$.

In actuality 63,392 lunations consume 1,872,003.034496 days;²⁰ meaning that the anticipated conjunction (or “investiture”) of ‘observable lunations’ (or “display”) with ‘a round number of days’ would ‘converge’ just under 50 minutes after midnight,²¹ 25 December 2012, granted the conventional starting date (11 August 3114 BC).

Needless to say, because of the discrepancy between ancient and actual mean measures of lunation, no convergence of ‘an integral compound of lunations’ with ‘a round number of days’ ensues.

December New Moon, as it turned out, fell on the 13th (at 8:42 GMT), not the 21st, 23rd, 24th or 25th, as the Long Count cycle had been variously interpreted.

Which means that the presumed start date of the Mayan calendar must have been out by 9 days, and the ‘end-time’ should have been backdated accordingly from the 21st to the 12th (the day before December New Moon): a provocative ‘convergence’ by current standards (12.12.12), if their calculation weren’t in fact flawed.

Had the Maya (or whoever made the calculation) ever actually witnessed one of these 13-B’ak’tun ‘convergences’, however, it would have become painfully clear that their long-held belief was terribly in error.

CITING

Mayan Long Count Deciphered.

HEKAT FRACTIONS

Myths of the various conflicts between Horus and Set involve destruction of the Eye of Horus (*wadjet*). In one myth Set tore the eye into six pieces which he scattered to the wind. The Ennead (or Council of Nine Deities) directed Thoth to recover the parts and restore the eye.

20 $63,392 \times 29.530588 = 1,872,003.034496$.

21 $.034496 \times 1440 \text{ minutes/day} = 49.67424 \text{ minutes}$.

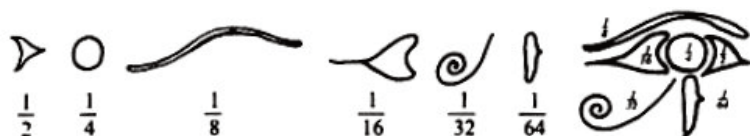
As Horus represents waxing crescent (which emerges on day 3 of the lunation), Thoth embodies waxing half-moon (occurring on day 9 in the cycle) – consecutive focal phases of the rising arc of the lunation, separated by six nights. The eye of Horus, in this respect, reflects the first *visible* phase of the new lunation – the first two nights of the cycle remaining dark without any moon in the sky – while the six pieces of the eye represent the six spectres of the concave quarter of the rising arc which fuse to form the half-moon (completing the reign of the concave spectres, before the throne of heaven is relinquished to the gods of the convex spectres of the gibbous quarter of the waxing arc).

The six portions of the figurative eye were subsequently adapted as *measures* by Egyptian mathematicians – each part designating a signal fraction employed in the measure of volume (the hekat fractions). The portion of the cornea nearest the nose represented $\frac{1}{2}$ and was associated with the sense of ‘smell’. The pupil signifying $\frac{1}{4}$ represented ‘sight’. The eyebrow added $\frac{1}{8}$, inclined to ‘thought’.

The outer portion of the cornea comprising $\frac{1}{16}$, appears drawn to the sense of ‘hearing’. The falcon flange beneath the eye (toward the ear) designated $\frac{1}{32}$, directing attention to the sense of ‘taste’. While the figurative leg depending from the eye (toward the nose) comprised the fraction $\frac{1}{64}$, partial to the sense of ‘touch’ – as in ‘touching down’.

Addition of the hekat fractions, however, presented an inexplicable discrepancy: restoration of the Eye of Horus from the recovery of all the parts leaves $\frac{1}{64}$ unaccounted for [$\frac{1}{2} + \frac{1}{4} + \frac{1}{8} + \frac{1}{16} + \frac{1}{32} + \frac{1}{64} = \frac{63}{64}$]. In the myth, the missing portion was ultimately supplied by Thoth, the god of just measure.

There is something more to this equation, it turns out, than meets the eye of scholarly consensus. When applied to the length of the Egyptian month (30 days) the product of the assembled fractions relinquishes the length of the mean lunation, to within a minute [$\frac{63}{64} \times 30 = 29.53125$].

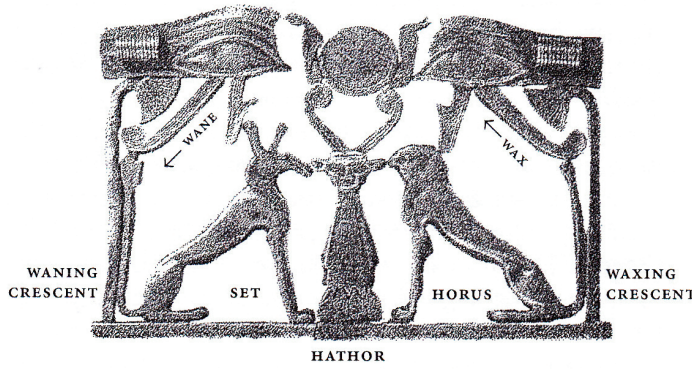


VIII THE EYE OF HORUS ANATOMIZED

OPPOSING ARCS OF LUNATION

WANING OR SECOND FULL MOON
EYE OF RA

WAXING OR FIRST FULL MOON
EYE OF HORUS



IX TWELFTH DYNASTY PECTORAL: EYES OF HORUS & RA

The length of the average lunation is currently calculated at 29.530588 days; the difference between the modern and the putative Egyptian measures amounting to 57.1968 seconds.²² Somehow the Egyptians appear to have recognized that the difference between the calendrical expedient of their 30-day month, and the actual length of the mean lunation, comprised a 64th of the month!

The Eye of Horus, in other words, embodied two distinct lunar measures; the month of 30 days (discrete); and the mean lunation (anatomized), which the Egyptians apparently calculated to extend 29 days 12 hours 45 minutes (our contemporary calculation 29 days 12 hours 44 minutes 3 seconds).

The leg symbol for the fraction $\frac{1}{64}$, moreover, denoted 'rest' and 'healing'. 'Rest', it now becomes clear, because the terminal fraction of the lunar equation required doubling – or 'resting at that point in the equation', to count it again in order to complete the month and 'heal' the shattered Eye of Horus fully.

It bears further notice that the terminal phase of the schematized lunation – waning crescent, represented by the Egyptian god Osiris – embodied a duplex count when two successive lunations were configured alternately as male (29-day) and female (30-day) months: the terminal phase counting as day 29 in the first and day 30 in the second.

The waning crescent of the 30-day month, therefore, was to be equated with the missing 64th in the hekat equation, supplied by Thoth – a categorically underworld completion (in that it embodied an interval which could not claim to reside in the lunation, the actual source of time: because $\frac{63}{64}$ of the 30-day month exhausted the lunation). An echo from the catacombs of the underworld goddess, Hecate...

The equation of the hekat fractions – with denominators doubling – also prefigures the celebrated Paradox of Zeno (Zeno of Elea, *fl. ca* 460 BC): a sequence of successive half-

22 $29.53125 - 29.530588 = .000662$ day;
 $.000662 \text{ day} \times 86,400 \text{ seconds/day} = 57.1968 \text{ seconds}.$

measures extending to infinity without ever reaching their terminus (unity).

The 'Eyes of Horus' have long been thought to figure the sun and moon, yet my research challenges the established reading. The 'Eye of Horus' mirroring a second 'Eye of Ra', accords perfectly with twin full moons presiding over their respective arcs of lunation: Horus as waxing crescent representing the first visible phase of the waxing arc (which culminates with first full moon); and Ra as second full moon, the first phase of the waning half of the lunation.

In the composition, Set figures as the first waning phase (mirroring Horus as first waxing phase) because the 'Eyes' surveying their respective arcs embody the two full moons. Hathor between them (with two opposing horns to reflect the mirror-images of the opposing crescents) represents the two dark nights between crescents when the moon 'remains' in the underworld realm of the goddess. The winged disk above her configures a complete lunation.

Thus the composition of Horus confronting Set may be reviewed as a depiction of 'first waxing spectre' figuratively complementing 'first waning spectre' – with opposing 'Eyes of Horus and Ra' surveying their respective arcs of lunation from the pinnacle of the cycle: that of Horus oriented as 'rising to its brightest light' (first full moon) and that of Ra 'descending from its brightest point' (second full moon).²³

CITING

The Lunar Context of the Hekat Fractions.

- 23 NOTE Long after I made this discovery my attention was directed to an online exchange contending that I had appropriated my Hekat insights from an offended Hans Gnädinger. I quickly informed him by email that my discovery was in fact original, nor had I heard of him before encountering the comment. The brief proof of his work which he sent, revealed that he had in fact failed to appreciate the significance of the missing 64th with regard to the distinction between calendar and actual lunar measures, despite having recognized the lunar basis of the myth apparently on his own.

JUBILEE CALENDAR

It bears noting that Judaic observance of the original Levitical 49-year Jubilee measure (revealed to Moses) is presumed to have been discontinued because of the disruption of the Babylonian Exile, rendering it incomprehensible after more than 400 years of disuse (587–177 BC).²⁴

“You will count seven weeks of years: seven times seven years, that is to say a period of seven weeks of years, 49 years. And on the tenth day of the seventh month you will sound the trumpet; on the Day of Atonement²⁵ you will sound the trumpet throughout the land. You will declare this fiftieth year to be sacred and proclaim the liberation of all the country’s inhabitants” (Leviticus 25:8–10).

From shortly before the Babylonian Exile (587–538 BC) to the Maccabean Revolt (168–163 BC) incited by the Seleucid prohibition against Judaism (168 BC), the inhabitants of Palestine were governed by the calendars of Egypt (609–605 BC), Babylon (605–538 BC), Persia (538–332 BC) and Macedon (332–129 BC) in succession. It is my contention that the barbarous prohibition of *Epiphanes* (Seleucid king, Antiochus IV) was ultimately provoked by the introduction of the Essene version of the Jubilee calendar (177 BC).

The last observed Levitical Jubilee (projected to end in 574 BC) was, according to two interpretations of Biblical chronology,²⁶ the 17th following the Exodus. Significantly,

- 24 In fact the secret of how it worked appears to have remained intact, until recently, for close to 2600 years.
- 25 Its importance cannot be overstated given that the holiest day in Judaism, the Day of Atonement (Yom Kippur), was established by the enigmatic Levitical 49-year Jubilee measure.
- 26 Both the second century AD *Seder Olam Rabbah* (*Great Order of the World*) and projections from the independent computations of Edwin Thiele (*The Mysterious Numbers of the Hebrew Kings*) support the conjecture that the Israelites entered Canaan in the year 1406 BC, the date from which the introductory Jubilee has been conventionally projected (1406–574 BC = 833 elapsed years, inclusive; $833 = 17 \times 49$).

at the time of the Exile (587–538 BC) the number ‘17’ was widely considered ‘the abominable number of downfall’ (because the 17th day of lunation inaugurates the waning or falling arc of the lunar cycle).²⁷ Thus the ‘fall’ of Judah into captivity in 587 BC during the 17th Jubilee, if not mere coincidence, appears to entail an element of calculation.

The Levitical Jubilee measure, as I have shown,²⁸ was calibrated to lunar cycle; while the replacement, conceived by the Essenes after failing for twenty years²⁹ to decipher the original (197–177 BC), involved an expedient solar reduction (known to Scroll scholars as the Zadokite variant).

As I have also shown, the seventh ‘month’ decreed in the Levitical 49-year Jubilee measure (Leviticus 25:9) was neither a lunar nor ‘monthly’ interval, but rather a computational 10-day solar embolism (denoted a 50th ‘year’ because it exceeded the 49th) added to 49 calendar years of 365 days (17,885 days) to adjust a lagging calendar to the lunar cycle (606 lunations³⁰ = 17,895.536 days).³¹

27 “The Egyptians have a legend that the end of Osiris’s life came on the 17th of the month [referring to the lunation], on which day it is quite evident to the eye that the period of the full moon is over. Because of this the Pythagoreans call this day ‘the Barrier’, and utterly abominate this number” (PLUTARCH, *Isis and Osiris* [367] 42; Frank Cole Babbitt translation, pp101–3). Plutarch (46–120), although a senior priest at Delphi, clearly puzzled over ancient myth (*Isis and Osiris*) and symbol (*On the E at Delphi*); suggesting either that initiation into the Mysteries during the period when the Gospels were purportedly composed, had become purely ritual, or that certain key works involve dissimulation.

28 *The Levitical 49-year Jubilee Calendar*.

29 Twenty years, according to the *Damascus Document* (CD 1:5–11); but if an interval of forty years is entertained (Ezekiel 4:6) the putative period of decipherment may be extended back to 217 BC: a signal 49 years before the Edict of *Epiphanes* (168 BC).

30 Six lunations in excess of ‘fifty lunar years’ (which comprise 600 lunations) give rise to the characterization of the embolism as a seventh excess ‘month’, though not with respect to the 50 lunar years, but in a correlative 50th calendar year (comprising only ten days). Effectively isolating a residue of seven aggregate ‘months’ (the six lunations plus the seventh ‘month’) in excess of the two specified control measures (49 solar and 50 lunar ‘years’). It becomes evident the ten days (of this seventh ‘month’)

Which clearly affirms the primacy of the Levitical lunar observance: lunation 607 proceeding directly on the heels of 606; while the calendar measure, based on a rounded solar cycle, had to be suspended for ten days before resuming its successive 49-year count.³²

CITING

The Levitical 49-year Jubilee Calendar.

153 LARGE FISH

When the resurrected (though yet unrecognized) Christ reveals himself to the seven fishermen at the Sea of Galilee (in His third appearance to the apostles) He directs them to cast their net over the right side of the boat (John 21:6), producing a catch of ‘153 large fish’, a figure which has stumped scholars for two millennia. Given that the moon, however, appears to descend each morning into the waters of ‘the underworld’, “large fish”, by extension, may in fact refer to ‘a month-long cycle of lunar phases’ (the spent lunation conceived as a ‘school’ of submerged or extinguished phases).

Because the mean lunation extends 29.530588 days (as scientifically computed), compound lunations never strictly comprise whole-day products. But 153 lunations (which accumulate 4518.179964 days employing the modern rounded measure)³³ come close enough to a whole-day product to invite the projection of an ancient average cycle of 29.529412 days, when those 153 lunations have been computed to extend an even 4518 days³⁴ (a difference, re-

constitute a purely paper addition (affording no actual time for such practical activities as sowing or reaping, explaining their injunction during Jubilee ‘year’); the 50th ‘year’ emphatically described as “sacred” (implying ‘secret’) expressly to distinguish it from a natural one.

31 $606 \times 29.530588 = 17,895.536$.

32 <http://archive.org/details/TheLevitical49-yearJubileeCalendar>.

33 $153 \times 29.530588 = 4518.179964$.

34 $4518 \div 153 = 29.529412$.

markably, of only .001176 days or 101.6 seconds per lunation, from the modern mean).³⁵

The authors of the Gospel of John (arguably the Essenes), in other words, conceivably settled on the figure of 153 large fish as an integral expansion of compound lunations (comprising an even 4518 days). The implicit 29.529412-day calculation, then, may tentatively be taken to represent their putative measure of mean lunation.

Corroborating the assumption that 'large fish' represent lunations, 4518.179964 days comprise 12.370367 years,³⁶ a quotient remarkably coincident with the number of lunations in a solar year (12.368267).³⁷ Dividing the rounded Julian year (365.25 days) with the putative Essene measure of mean lunation (29.529412 days), moreover, produces an even nearer convergence of 12.369024 lunations per year.³⁸

The difference between this projected quotient and the actual measure (.000757 lunations per year)³⁹ amounts to a disparity of slightly more than half an hour a year⁴⁰ or a mere 2.6 minutes per lunation.⁴¹ In other words, 153 lunations 'coincidentally' surrender the same number (in years) as there are lunations in a year.

The authors of the Gospel of John managed to settle on a sum of large fish (hypothetically lunations) which 'coincidentally' incorporates remarkably accurate measures both of the mean lunation (29.529412 days) and the number of lunations in a solar year (12.369024); as paradigmatic a pivot of lunar expansions as one could conceivably summon.

In other words, while the puzzle of 153 large fish has baffled Biblical scholars for two thousand years, 'coincidences' de-

35 $29.530588 - 29.529412 = .001176$ days;
 $.001176 \text{ days} \times 86,400 \text{ seconds/day} = 101.6064 \text{ seconds.}$

36 $4518.179964 \div 365.2422 = 12.370367.$

37 $365.2422 \div 29.530588 = 12.368267.$

38 $365.25 \div 29.529412 = 12.369024.$

39 $12.369024 - 12.368267 = .000757.$

40 $29.530588 \times .000757 = .022355$ days;
 $.022355 \text{ days} \times 1440 \text{ minutes/day} = 32.19 \text{ minutes.}$

41 $32.19 \div 12.368267 = 2.602685.$

limiting the precise synodic relation between lunar and solar cycle (both annually and cumulatively), emerge when the phrase is figuratively interpreted as a metaphor for 'lunations'; a previously unconsidered solution which implicitly confirms the conjectured cipher.

And since there are other lunation compounds which approach whole-number products even nearer (calendars being ideally constructed to harmonize extended measures, such as leap-year cycles, with integral solar and lunar intervals), the significance in settling on the figure '153' can be shown to reside additionally in its incorporation of 'factors constituting signal measures of lunar cycle' ($9 \times 17 = 153$): '9' representing the number of focal or identifiable phases in the lunation (seven recognizable spectres visible serially on high; plus two invisible aspects presumably resident in the underworld, presiding successively over the two terminal dark nights); and '17', the abominable number of downfall (day 17 in the lunar sequence inaugurating the waning arc of the cycle).⁴²

Both factors (being associated expressly with the underworld) necessarily direct attention to elapsed measures which have already disappeared into the extinguishing waters (precisely like the accumulated phases of 153 departed lunations).

While Pythagorean overtones from this expressly figurate number establish its 'sacred' or geometrical primacy, none satisfactorily elucidate the focal concepts of 'fishing' and 'large fish': [A] as the sum of the first 17 integers, '153' constitutes the 17th triangular number (the abominable number '17' invoking a sequence categorically associated with 'downfall'; as with a measure of elapsed or fallen phases); [B] it incorporates the sum of the first five positive factorials (1, 2, 6, 24, 120), tenuously underscoring the significance both in the factored division of the number '153' and the factoring

42 It bears noting that the waning arc would reflexively be oriented on the left side of an idealized lunation schematic or 'compass' because the curved left arm when raised resembles waning crescent, the terminal visible waning phase.

characteristic of the seven rejected lunation compounds cited above; [C] the progression of its digits are all triangular (1, 15, 153); [D] its digits generate it as a product (3×51); and [E] it is comprised of the sum of the cubes of its digits ($1 + 125 + 27$).

It should also be noted that this signal 'resurrection' number has been associated further both with the 'vesica piscis' (or 'mandorla') and Rosary (the Trinity crowning 15 rounds of 'ten Hail Marys' to produce the sum 153). The ancient method of constructing a square with rule and compass involved equal intersecting circles with circumference on the opposing centre, whose lens (or common area) appears piscine (p23): the geometrical 'vesica piscis' ("fish bladder"). When the short axis of the lens is 1, the long axis is the square root of 3; denoted by Archimedes (287–212 BC) with the ratio 153:265 (then known, revealingly, as the 'measure of the fish').⁴³

Both Porphyry (234–305) and Iamblichus (250–325) recount an episode in the 'life' of Pythagoras (569–490 BC) when he correctly guessed the number of fish in a net (widely held to prefigure the Biblical account, given both the ratio and epithet of Archimedes). In other words, the association of the number 153 with 'fish' appears to have extended back at least to the time of Archimedes if not Pythagoras (leaving little doubt that the gospel of John was contrived to implicate Christ in an ancient tradition of calendrical insight).

- 43 The circles further relinquish the square root of '2' and '5' respectively on the diagonals of the inscribed square and rectangle. While primes '3' and '5' each comprise the difference between successive squares ($3 = 4 - 1$; $5 = 9 - 4$). A figure (of intersecting circles) which not only relates the square roots of the first three prime numbers but also projects 'the circle inscribed in a square' (the symbol for the 16th letter in the earliest Alphabet denoting 'second full moon' on day 16 of the cycle). The figure, furthermore, from which the repeated ratios involving the square roots of '2', '3' and '5' respectively, in early Mediaeval architecture, were drawn. It bears noting also that the Pythagoreans (not to mention, Gnostics) considered '50' a "supremely sacred" number (according to Philo), the squares of the 3-4-5 triangle ($9 + 16 + 25 = 50$) concealed in the sum: the so-called Pythagorean triangle thereby epitomizing 'Jubilee'.

CATTLE OF THE SUN

That Archimedes was conversant with the ancient insights may be further illustrated by 'his' celebrated puzzle of the Cattle of the Sun (as explicit a calendrical reference as one might entertain; their *milk* directing the attentive reckoner to *lunar* measures). Modern mathematicians who claim solutions, have all misunderstood the nature of the problem, ignoring the riddle implicit in the four different-coloured herds (white, black, dappled and yellow).

The three equations for determining the size of the bull herds, for example, have led to computations of 2226 white, 1602 black, and 1580 dappled, bulls; which in turn demand a herd of 891 yellow bulls. Yet those who fail to recognize that the colours accord with idiosyncratic lunar measures, miss the essential significance in these sums.

The white bulls represent the seven focal visible phases in the lunation ($2226 \div 7 = 318$); the black, the two nights without a moon in the sky ($1602 \div 2 = 801$); while the dappled bulls refer to the twenty remaining unidentifiable spectres ($1580 \div 20 = 79$); the three together accumulating the cycle's 29 integral phases.

Thus, as the puzzle demands, the sum of the white and black bulls indeed produces a square number ($7 + 2 = 9$); not the rectangle substituted by some to strain solutions.

The yellow bulls apart obviously represent a solar measure (the lack of an equation further intimating an encompassing sum); 891 cleverly concealing a signal great-year compound (9×99 , a mathematical distillate of '99 lunations', epitomized in the delimiting lunar Ennead of 'the nine focal phases'). The prevailing variable-month lunisolar calendar (employed by the Greeks and Israelites) observed an extended cycle of eight years comprising 99 months.

Thus, as the puzzle further stipulates, the sum of the dappled and yellow bulls constitutes a triangular number ($20 + 8 = 28$); the solar coefficient categorically characterized,

as might be expected, in years. (Predictably, the second part of the problem requiring multiplication of the herds by the prime number 4657, manages to preserve their respective divisibility.)

Although Thrinacia (the three-cornered isle harbouring the legendary Cattle of the Sun) is identified by literalists with Sicily, it bears reflecting that the visible portion of the lunation (27 spectres among the 29 phases) figuratively emerges as an 'island' in the celestial sea (because the other part remains submerged in its depths). An 'island' bounded on three corners by the opposing crescents and full moon (the most, and least, submerged spectres).

THE FLOOD

The myth of an ancient global deluge is one of our most ingrained legacies from the past. Innumerable cultures preserve versions of this myth – the oldest extant texts deriving from Mesopotamia, in the Eridu Genesis and Sumerian *Gilgamesh* narratives. The Biblical account of a flood can be readily traced back to these earlier texts.

The account of the Flood in the Bible, however, contains a number of glaring inconsistencies. Most scholars agree that the likeliest explanation for such divergence is that the account as it now stands, preserves two distinct records:

“Exegetical criticism has conclusively demonstrated – and this is admitted by all the experts without exception, Roman Catholic, Protestant and agnostic – that the narrative of Genesis 6–8 is in reality the fusion of two accounts, closely interwoven, one of which (J = Jahvistic) dates from the eighth century BC, the other (P = Priestly) dating at the earliest from the sixth century BC.” [PARROT, *The Flood and Noah's Ark*, p15]

What is not widely appreciated is that the main reason for arriving at this conclusion is that the numbers in successive

verses of the same chapter of Genesis, don't match; that is, the problematic discrepancies prove to be mathematical.

Numerical inconsistencies are common throughout the Bible; but where a lack of supporting details precludes the 'divergent-source' hypothesis, such incongruities are simply dismissed by the experts as the result of 'approximation' – in place of a more rigorous 'numeracy'. In the book of Samuel, for instance, David is accorded discrepant reigns:

"David was 30 years old when he became king, and he reigned for 40 years. He reigned in Hebron over Judah for 7 years and 6 months; then he reigned in Jerusalem over all Israel and Judah for 33 years."

[2 Samuel 5:4/5]

A typical commentary abandons the search for a solution, distracted by the observation that the details of David's life remain mysteriously thin, given his focal significance:

"It is hard to know how seriously to take these figures. The number 40 is often used as a round number for a generation in the Bible, and it looks suspiciously like one in David's case. Perhaps 33 was simply added to his 7½ years in Hebron (a more reliable number?) in order to bring the total to 40. Solomon is also credited with a 40-year reign. The book of 2 Samuel recounts strikingly little of David's 33 years in Jerusalem, especially given David's reputation as Israel's greatest king." [MCKENZIE, *King David: A Biography*, p138 – *emphasis added*]

As I've shown, the discrepancy in this case may be readily resolved by recognizing that his disparate reigns in fact involve divergent calendar measures.⁴⁴

44 Both reigns involve the 8-year calendar: Saul personifying the initial 100-month measure; David – 8th son of Jesse – the revised 99-month version. The 99-month 8-year cycle comprised five 12-month and three 13-month 'years'. The disparity between the duration of David's reigns (40 years 6 months) and their total (40 years) dissolves when you recognize that the variant sums may profitably be 'reduced' to an equivalent number of months. David's first reign (7 years 6 months) comprises five 12-month [60] and two 13-month [26] 'years', as well as

Is it possible that the mathematical discrepancies in the account of the Flood might also benefit from a calendrical comparison? This hypothesis entertains the prospect that the disparate sums in chapters 6 through 8 in the book of Genesis were meant to be interpreted as complementary aspects of a new ‘anoointed’ calendar measure.

The first glaring discrepancy involves the animals Noah is instructed to take aboard the ark:

“Of all the clean animals you must take seven of each kind, both male and female; of the unclean animals you must take two, a male and its female (and of the birds of heaven also, seven of each kind, both male and female), to propagate their kind over the whole earth.” [Genesis 7: 2/3]

A few lines later the narrative appears contradictory:

“(Of the clean animals and the animals that are not clean, of the birds and all that crawls on the ground, two of each kind boarded the ark with Noah, a male and a female, according to the order God gave Noah.)”
[Genesis 7:8/9]

First impressions may lead reflexively to the conclusion that these are likely different accounts of the same event; but is it not conceivable that the disparity might arise from separate measures of the same thing (eg, 5 fingers, 1 hand)?

Entertaining the hypothesis that both accounts refer to the lunar cycle, it may be seen that the initial sum tidily accords

the six additional months, for a total of 92 months [$60 + 26 + 6 = 92$]; while his successive reign of 33 years may be broken into four 99-month cycles [$4 \times 99 = 396$] plus an extra 12-month ‘year’, for a total of 408 months [$396 + 12 = 408$] – the two sums combining to produce a grand total of 500 months [$92 + 408 = 500$]. Which equals the number of months in a 40-year reign when computed as five of the ineffectual 100-month 8-year cycles [$40 = 8 \times 5$; $5 \times 100 = 500$]: ie, the same number of months, but a more *enduring* reign (given the inherent problem, after 128 years, with Saul’s inferior measure). David, in other words, embodies the solution to a calendrical complication involving two disparate measures – the scripture drawing attention to the greater durability of the later ‘anoointed’ refinement, with the conspicuous incongruity of these contiguous sums. [cf, *Myth as Math*, pp149f]

with the seven focal phases in the lunation: waxing crescent; waxing half-moon; twin full moons; first waning phase; waning half-moon; and waning crescent. These are the only spectres or phases in a lunation which are readily identifiable on observation. Phases between these spectres cannot be conclusively identified on sight; the observer able only to recognize them as spectres which fall somewhere in the lunation sequence between two 'clean' phases.

The 'unclean' phases between the 'clean' ones are each accorded a night and a day – or male and female issues⁴⁵ – because the moon was perceived as a distinct male spectre which descended into the underworld lair of the goddess during 'his' daytime, to propagate the successive phase for the following nighttime; each male spectre coupling with a different aspect of the lunar goddess. Which holds true for both 'clean' and 'unclean' phases – explaining the apparent conflict between the 'divergent' accounts.

As suspected, the model of the generic lunation suggests that these apparently contradictory allusions may in fact prove to be supplementary. The birds aboard, for example, lay the emphasis on 'something that flies' in the model alluded to – directing attention to the sky. After the flood, Noah sends a raven⁴⁶ out (the bird of night, emblem of the underworld) followed by a dove (white like the moon). But the dove is forced to return to the ark twice before finding a perch – the third night of the successive lunation bearing the first sign (a sliver) of the new moon on high.⁴⁷

45 The visible phases were considered male because the lunation begins and ends with a phallic sliver (waxing and waning crescents); while the two nights without a visible spectre in the sky were denoted female because the moon was believed to have been confined to the underworld realm of the earth-mother goddess during the dark interval.

46 The symbol of the raven alerts the reader to the possibility that the passage has something to do with night; the recurrent attempts of the dove, that it deals with something white which takes three tries to secure a perch; while birds naturally implicate the sky.

47 Genesis 8:6–12.

The Flood, in other words, here accords with a recurrent phenomenon: the submergence of the moon in the waters of the underworld, for three days and two nights following the decline of waning crescent at the end of each lunation. Which would explain the ‘immortality’ of Ut-Napishtim:⁴⁸ he must conduct the ‘seed’ (or spark) of renewed life (or light) through the extinguishing depths of the underworld, to restore the moon to its place in the sky following the ‘deluge’ which consumes every lunation – for all eternity.

A long tradition of employing animals to represent lunar phases, as I have shown,⁴⁹ stretches back beyond the period of the Palaeolithic cave murals – the horns of the ungulates drawing a natural association in primitive iconography, with the lunar crescents. In a symbolic light, Noah may be understood merely to transport the identifying totem for each lunar phase, through the underworld seas during the ‘three-day and two-night dark interval’ between waning and waxing crescents, to the subsequent lunation.

The second discrepancy in the Biblical version of the Flood concerns its end:

“It was in the six hundred and first year of Noah’s life, in the first month and on the first of the month, that the water dried up from the earth. Noah lifted back the hatch of the ark and looked out. The surface of the ground was dry!” [Genesis 8:13]

Yet in the very next line the text asserts:

“In the second month and on the twenty-seventh day of the month the earth was dry.” [Genesis 8:14]

Might the model of lunar measure likewise render these divergent accounts complementary?

When “he became the father of Shem, Ham and Japheth” Noah was 500 years old.⁵⁰ “In the six hundredth year of

48 Ut-Napishtim (the ancestor of Gilgamesh) who “alone among all men” gained eternal life, was the Sumerian Noah. [PARROT, *The Flood and Noah’s Ark*, p25]

49 *Lascaux Measures: A Review of the Symbolism of Palaeolithic Parietal Figures*.

Noah's life, in the second month, and on the seventeenth day of that month" the Flood began.⁵¹ And on the first day of the first month of his six-hundred-and-first year, all the water was gone.

The Flood – which ended on day 219,001 of Noah's life⁵² and began on day 218,682⁵³ – can thus be computed to have lasted 319 days.⁵⁴ And the number '319' conceals a telltale calendrical innovation, in the product of eleven of the new 29-day months employed – following the Flood – in the variable-month calendars of the Greeks and Israelites.⁵⁵

This radical innovation drew the measure of the 'month' far nearer to that of the mean 'lunation' (29.530588 days) by alternating 29-day male and 30-day female months in a great-year calendar extending eight years.⁵⁶ The Egyptian and Babylonian calendars which it replaced needed constant adjustment to bring them back into alignment with the solar cycle, because of their rigid adherence to the 30-day month.⁵⁷

The variable-month 8-year cycle comprised 99 months: 49 male 29-day months (1421 days) plus 50 female 30-day months (1500 days) extending 2921 days. Eight solar years consume 2922 days.⁵⁸ Thus a solitary extra intercalary day was added every 8 years to adjust the cycle to the seasons.

But the initial measure of the 8-year calendar cycle – the flawed 100-month variant – had been conceived with eight

50 Genesis 5:32.

51 Genesis 7:11 – *ie*, 99 years later (prefiguring a 99-interval measure).

52 $600 \text{ years} \times 365 \text{ days per year} = 219,000 \text{ days} + 1 \text{ day (the first day of the first month of the 601st year)} = 219,001 \text{ days}$.

53 $599 \text{ years} \times 365 \text{ days per year} = 218,635 \text{ days} + 30 \text{ days (the first month)} + 17 \text{ days (of the second month)} = 218,682 \text{ days}$.

54 $219,001 - 218,682 = 319 [11 \times 29]$.

55 *Myth as Math*, pp17ff.

56 Two lunations ($2 \times 29.530588 = 59.061176$) exceeding two alternating months ($29 + 30 = 59$) by 88 minutes ($0.061176 \times 1440 = 88.09344$).

57 Twelve 30-day months in the generic year (360 days) which had to be completed with the addition of 5 intercalary days per year (Egyptian) or an extra month every six years (Babylonian).

58 $8 \times 365.2422 = 2921.9376$ (2922 with the year computed at 365.25 days).

364-day years comprising eleven 29-day months plus one-and-a-half 30-day months, requiring the addition of an extra ten intercalary days every cycle.⁵⁹

Both these innovations were an improvement over the earlier calendar which required an extra 5 days per year (as well as further complex adjustments every 25, 70, 350 and 500 years).⁶⁰ The 100-month 8-year cycle, however, proved problematic after 128 years,⁶¹ prompting the revision of the ‘anointed’ 99-month version.

The duration of the Flood – 319 days – therefore, alerts us to the possibility that the introduction of the variable-month calendar occasioned a disruption which allowed the old corrupt order to be replaced.⁶² But only after the waters had disappeared (with the passing of the flawed 100-month version of the 8-year calendar) were conditions restored to God’s liking. The perfected 99-month 8-year calendar was anointed the Chosen Measure.

59 $[11 \times 29] 319 + 45 [1\frac{1}{2} \times 30] = 364; 8 \times 364 = 2912; 2912 + 10 = 2922.$

60 *Instructions for Restoring the Ancient Wisdom*, pp48/9.

61 Extended application of the 100-month 8-year measure exhausted its usefulness in synchronizing lunar and solar cycles after 128 years, because each 8-year cycle exceeded the interval of 8 solar years by .0625 days or 90 minutes (2922 – 2921.9376). Meaning that after 16 of the 100-month 8-year cycles, the great-year measure would be an entire day ahead of the sun, which would require subtraction to rectify. But intercalation of calendrical measures is confined to adding days to bring a lagging calendar back into step with the celestial cycles (10 days each 100-month cycle). The 99-month variant of the 8-year great-year measure rectified the defect by falling short of 8 solar years .9376 days every cycle (without the intercalated day). Meaning that the single day which was intercalated after each of the first fifteen 8-year cycles could be withheld after the sixteenth 8-year cycle to bring the calendar and solar cycles back into step, once an entire day difference had been accumulated. [*Instructions for Restoring the Ancient Wisdom*, p50]

62 “The earth grew corrupt in God’s sight, and filled with violence...of man’s making” [Genesis 6:11, 13]; “He rid the earth of them, so that only Noah was left, and those with him in the ark” [Genesis 7:23]; the corrupt calendar (‘time’ as construed by mortals) had long violated Nature (‘time’ orchestrated by God) in continually falling out of step with the visible seasons (“God’s sight”).

Thus, in a calendrical light, the Biblical narrative of the Flood demonstrably accords both with the nature of the heavenly lunation and man's attempts to perfect an earthly calendar with which to keep track of it.

Noah had lived 600 years when the Flood came to an end. Computed in whole years, he had lived 219,000 days.⁶³ But the year actually exceeds 365 days; the new 8-year calendar reckoned in years of 365.25 days. His age in reality comprising 219,150 days: a difference of 150 days.⁶⁴

The Flood began on the 17th day of the second month⁶⁵ after Noah's 599th birthday; while the ark came to rest atop Mount Ararat on the 17th day of the seventh month.⁶⁶

"The waters rose on the earth for 150 days." [Gen 7:24]

In other words, the 150-day disparity in Noah's age over a period of 600 years, when calculated with the approximate (Egyptian 365-day) and more accurate (Israelite 365.25-day) year-lengths, accords with the rise of the flood-waters over the earth. That is, 'the revised measure of 600 years' rose by 150 days with the improved year of the 'anointed' measure: the rising tide in actuality 'a swelling of time'.

The Biblical account of the Flood likewise preserves a computation of the 'swell' in the actual lunation, above the expedient measure of the 29.5-day month.⁶⁷ The difference between the length of the mean lunation (29.530588 days) and the generic month (29.5 days) is 0.030588 days. Over a period of 600 rounded years (219,000 days) there would be 7423.7288 generic months.⁶⁸ Multiplying this figure by the 'swell' of a lunation gives a product of 227.07701 days.⁶⁹

63 600 years $\times$ 365 whole days per year = 219,000 days.

64 600 years $\times$ 365.25 rounded days per year = 219,150 days.

65 Genesis 7:11.

66 Genesis 8:4 – an interval of five months $\times$ 30 days = 150 days.

67 $29 + 30 = 59$; $59 \div 2 = 29.5$.

68 $219,000 \text{ days} \div 29.5 \text{ days per generic month} = 7423.7288 \text{ generic months}$.

69 $7423.7288 \text{ months} \times 0.030588 \text{ days} = 227.07701 \text{ days}$; $0.07701 \text{ days} \times 1440 \text{ minutes} = 110.8944 \text{ minutes}$ or 1 hour 50 minutes 54 seconds.

The Biblical allusion to this product is secreted in the enigmatic second date for the end of the Flood:

"In the second month and on the twenty-seventh day of the month the earth was dry." [Genesis 8:14]

Cryptic though it may be, the numbers 2 and 27 accord remarkably with the number of days lost over a period of 600 rounded years, employing the generic month instead of the actual lunation: 227.

Although one's first inclination might be to dismiss the similarity as a coincidence, the fact that three earlier figures in the Flood narrative also accord with calendar measures (not to mention the calendrical nature of a conflict in dates for the end of the Flood; or the demonstrable resolution of David's disparate reigns) lends credence to the equivalence in this otherwise incomprehensible reference.

Neither is it a coincidence that there were eight people aboard the ark: Noah, his three sons, and their four wives personifying the 'anointed' 8-year calendar.

"Then God said to Noah, 'Come out of the ark, you yourself, your wife, your sons, and your sons' wives with you....Be fruitful, multiply and fill the earth'... and from these the whole earth was peopled."
[Genesis 8:15; 9:1,19]

And God made their line (or measure) a promise:

"I establish my Covenant with you: no thing of flesh shall be swept away again by the waters of the flood. There shall be no flood to destroy the earth again."
[Genesis 9:11]

In terms of the calendrical hypothesis, the new eight-year great year measured time so much more accurately than its predecessor, that the prospect of a future replacement of this earthly or man-made refinement had been obviated.

It reflected the nature of the solar and lunar cycles more clearly than any previous measure; the 'animals' released from the ark (*ie*, its 'nightly measures' better equating with

the natural phases of the actual lunation) ‘propagating’ without threat of future annihilation, because commensurate.

The generic month of 30 days employed in the earlier Egyptian calendar exceeded the duration of the mean lunation by 11 hours 15 minutes 57 seconds.⁷⁰ Meaning that an extra calendar (or man-made) day exceeding the natural cycle of the lunation was accumulating every 64 days.⁷¹

In a year of twelve thirty-day months the accumulation exceeded five days.⁷² And these man-made days “of flesh” had to be “swept away” to align the month with God’s natural cycle – but unlike added intercalations, subtracting calendar days invites chaos (*cf.* 3–13 September 1752).

CITING

Myth as Math: Calendrical Significance in the Mosaic Census of the Sons of Israel.

Lascaux Measures: A Review of the Symbolism of Palæolithic Parietal Figures.

Instructions for Restoring the Ancient Wisdom: A Primer of the Pythagorean Practicum.

Noah by the Numbers: Calendrical Clues in the Flood.

70 30 days in a generic month – 29.530588 days in the mean lunation = 0.469412 days difference; 0.469412 days × 24 hours = 11.265888 hours or 11 hours 15 minutes 57 seconds.

71 one accumulated day ÷ 0.469412 days per generic month = 2.1303247; 2.1303247 months × 30 days per generic month = 63.909741 days.

72 0.469412 days × 12 generic months = 5.632944 accumulated days or 5 days 15 hours 11 minutes 26 seconds.

PUBLICATION HISTORY

- [1] *God's Wand: The Origin of the Alphabet* (2002)
OUTLANDS 5
- [2] *God's Shadow: A Chronological Supplement of Sample Figures Illustrating a Continuous Tradition of Covert Lunar Notation* (2004)
- [3] *Shrouded in Scripture* (2004)
[<http://archive.org/details/ShroudedInScripture>]
- [4] *Myth as Math: Calendrical Significance in the Mosaic Census of the Sons of Israel* (2007) OUTLANDS 7
[<http://archive.org/details/MythAsMathProspectus>]
- [5] *The Lunar Origin of the Alphabet* (2008) ABSTRACT 1
[<http://archive.org/details/TheLunarOriginOfTheAlphabet>]
- [6] *The Dawn of Procreation* (2008) ABSTRACT 2
[<http://archive.org/details/TheDawnOfProcreation>]
- [7] *The Levitical 49-year Jubilee Calendar* (2008) ABSTRACT 3
[<http://archive.org/details/TheLevitical49-yearJubileeCalendar>]
- [8] *Lascaux Measures: A Review of the Symbolism of Palæolithic Parietal Figures* (2008) ABSTRACT 4
[<http://archive.org/details/LascauxMeasures>]
- [9] *The Lunar Context of the Hekat Fractions* (2008)
ABSTRACT 5
[<http://archive.org/details/TheLunarContextOfTheHekatFractions>]
- [10] *Fluke Photo* (2008) ABSTRACT 6
[<http://archive.org/details/FlukePhoto>]
- [11] *Sacred Chronology Excerpts* (2009) ABSTRACT 7
- [12] *The Lunar Origin of the Week* (2009) ABSTRACT 8
[<http://archive.org/details/TheLunarOriginOfTheWeek>]
- [13] *The Abstracts* (2009) ABSTRACTS 1 through 8
- [14] *Instructions for Restoring the Ancient Wisdom: A Primer of the Pythagorean Practicum* (2009) ABSTRACT 9
[<http://archive.org/details/InstructionsForRestoringTheAncientWisdom>]

- [15] *Seminar* (2009) ATELIER KOLANAD (video)
[<http://archive.org/details/DrumbolisSeminar>]
- [16] *Noah by the Numbers: Calendrical Clues in the Flood* (2010) ABSTRACT 12
[<http://archive.org/details/NoahByTheNumbers>]
- [17] *DCLXVI: The Number of the Beast* (2010) ABSTRACT 13
[<http://archive.org/details/DclxviTheNumberOfTheBeast>]
- [18] *Lunar Phases in the Alphabet* (2010) ABSTRACT 14 (précis)
[<http://www.omniglot.com/forum/viewtopic.php?f=4&t=558&sid=17db1fd32e34cb1687fbf5da1a160c09>]
- [19] *Mayan Long Count Deciphered* (2012) ABSTRACT 15
[<http://archive.org/details/MayanLongCountDeciphered>]
- [20] *Moon Over Qumran* (2013) OUTLANDS 9
[<https://archive.org/details/MoonOverQumran>]
- [21] *An Uncrossed Index to Myth as Math* (2013) OUTLANDS 7.2
[<https://archive.org/details/MythAsMathIndex>]
- [22] *Unresolved Anachronism in the Books of Moses: Greek Roots in the Pentateuch* (2015) OUTLANDS 12
[<https://archive.org/details/Anachronism>]
- [23] *Winter Solstice in the Ancient Observation of Metonic Cycle* (2018) [<https://archive.org/details/MetonicSolstice>]
- [24] *Çatalhöyük Bull-Hunt Mural* (2018)
[<https://archive.org/details/CatalHoyuk>]

NOTE appended URLs trace accessible electronic alternatives to the printed sources.

QUARKED IN MINION
2 FEBRUARY 2013
LINKS ACTIVATED
29 MARCH 2018